



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/718,086

11/19/2003

Reade Clemens

085.10546-US-A(01-465A)

9418

34704 7590 09/20/2010

BACHMAN & LAPOINTE, P.C.

900 CHAPEL STREET

SUITE 1201

NEW HAVEN, CT 06510

EXAMINER

NGUYEN, PHONG H

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

09/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Art Unit: 3724

The Applicant argues that prior art fails to provide reasonable expectation of success. This argument is not persuasive. Prior art teaches one skilled in the art finding directions in a diamond that has high and low wear resistant properties so that the diamond can be shaped accordingly. So there is a success in shaping a diamond according to some directions to increase the diamond's wear resistant property. One skilled in the art is a creative person. He/she would not stop at what given but try to explore for more options based on what given. Therefore, it would be reasonable to expect one skilled in the art to do repeated experiments to come up with the claimed directions.

Regarding the Applicant's argument with respect to the Shah declaration, Mr. Shah did not arrange carbon atoms in a diamond to create the $\langle 17, 12, 24 \rangle$ direction. He just did repeated experiments to find out that shaping a diamond according to that direction would increase the wear resistance of the shaped diamond tip. So whether Mr. Shah found that direction or not, that direction is always a part of a diamond. Therefore, the $\langle 17, 12, 24 \rangle$ direction is an intrinsic direction in a diamond and is old.

The Applicant argues that Batsch and Kobayashi are non-analogous art. This argument is not persuasive. Batsch and Kobayashi teach finding directions in a diamond so that a diamond tip can be shaped accordingly to increase the wear resistance of the diamond tip. It would have been obvious to one skilled in the art to do repeated experiments to come up with the claimed direction. Therefore, Batsch and Kobayashi are analogous art.